

Winter Storm Severity Index – Alaska Juneau

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Focus Group Agenda

Introduction to the Project and Introduction of all Participants

Pre-session survey

Scenario

Post-session survey

Potential Cold Temperatures Alaskan Panhandle Next Week (Day T-4 through Day T-2)

What We Know



- ✓ Cold Arctic Air from Canada Expected to move in next week
- ✓ Temperatures are expected to be near record cold temperatures
- ✓ Cold outbreak is expected to last for at least a few days
- ✓ Expect impacts to vulnerable populations and infrastructure

What We Don't Know (yet)



- Exact timing on arrival and length of Cold Snap
- Some uncertainty remains
- concerning how cold temperatures will fall to

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National Weather Service | Juneau, AK



Heads up Southeast AK: High pressure from Canada is forecast to build into the region next week. Now is the time to prepare. Temperatures will likely threaten vulnerable populations. Remember to take care of the 3 Ps. People, Pets, and Pipes.

Have you seen this kind of information/graphic before? What are you thinking about your situation after seeing this graphic? What decisions, if any, are you making at this point?

5-Day Outlook for SE AK

T- 4 to T



NWS Juneau



T - 4

T - 3

T - 2

T - 1

T

Record cold temperatures possible

Record Cold

High Wind Watch:

Skagway Midnight T-1 until noon T

Downtown Juneau Midnight T-1 until 9 PM T-1

Wind Chill Advisory:

Haines 6 PM T-2 to 6 PM T-1

Outlook: Potential for another round of heavy wet snow



Lowest Impacts



Minor Impacts



Moderate Impacts



Major Impacts

Issued: T-4 4:00 PM AKST

High pressure over Canada will keep Southeast Alaska cold for the next few days. Taku and other Gap winds are expected ahead of the next low pressure system from the Gulf of Alaska. This storm will be our next big precipitation event later this week.

There is currently about 2 feet of snow on the ground from storms over the past month.

A 3 day cold snap is about to settle into the region on T-4 through T-2, with a high wind event ahead of the next system that will impact the area on T-1 ahead of the next weather system. This cold air from the Canadian Side of the Coastal Mountains will keep cold air in place as a large low pressure system moves in from the Gulf.

What is this graphic telling you? How do you interpret your risk looking at this graphic? What decisions are you making based on this graphic? What do the impact colors and categories mean to you?

High Wind Watch

National Weather Service Juneau AK 338 PM AKST T-3

T-3

...HIGH WIND WATCH IN EFFECT FROM MIDNIGHT T-1 THROUGH LATE T-1 NIGHT...

* WHAT...Northeast winds 30 to 40 mph with gusts up to 70 mph possible.

* WHERE...Downtown Juneau and Skagway.

* WHEN...From Midnight T-1 through late T-1 night.

* IMPACTS...Damaging winds could blow down trees and power lines. Widespread power outages are possible. Travel could be difficult, especially for high profile vehicles.

* ADDITIONAL DETAILS...Confidence is increasing in periods of high winds on T-1. A strong low pressure system will move close to the panhandle and create strong Taku and gap winds in the passes.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Monitor the latest forecasts and warnings for updates on this situation. Fasten loose objects or shelter objects in a safe location prior to the onset of winds.

Do you use high wind watches? Are you taking any actions? What impacts are you concerned about high winds?

Special Weather Statement
National Weather Service Juneau AK
1038 PM AKST T-2

T-2

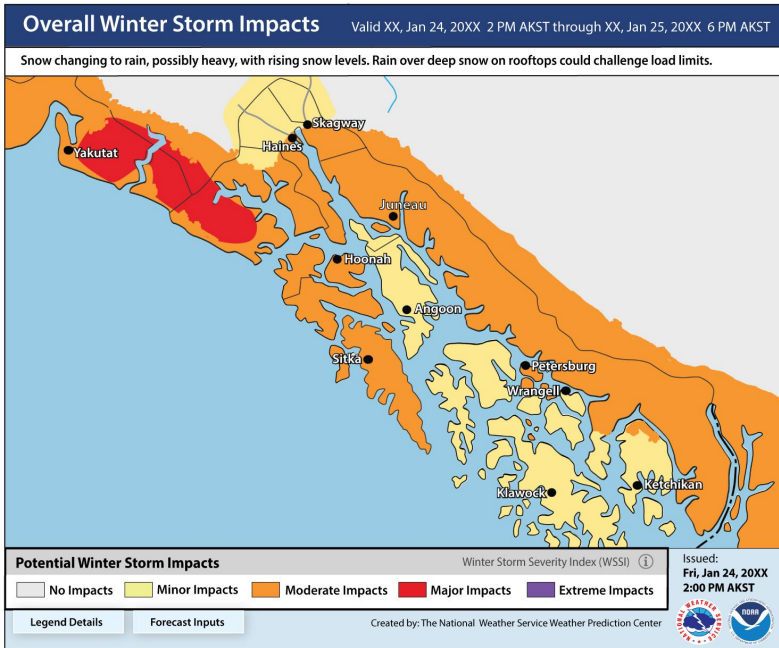
...SNOW CHANGING TO RAIN, POSSIBLY HEAVY, WITH RISING SNOW LEVELS STARTING LATE T THROUGH T+2...

Forecast Models continue to point to a possible atmospheric river event later this week into the weekend including warming temperatures, rising snow levels, and the potential for accumulating heavy snow changing to heavy rain.

At sea level, the precipitation is currently expected to start as snow for the first 24 hours before changing to all rain, heavy at times. Snowfall amounts look to be around a foot of snow with the start of this system. About 1 to 2 inches of water is expected in this snow.

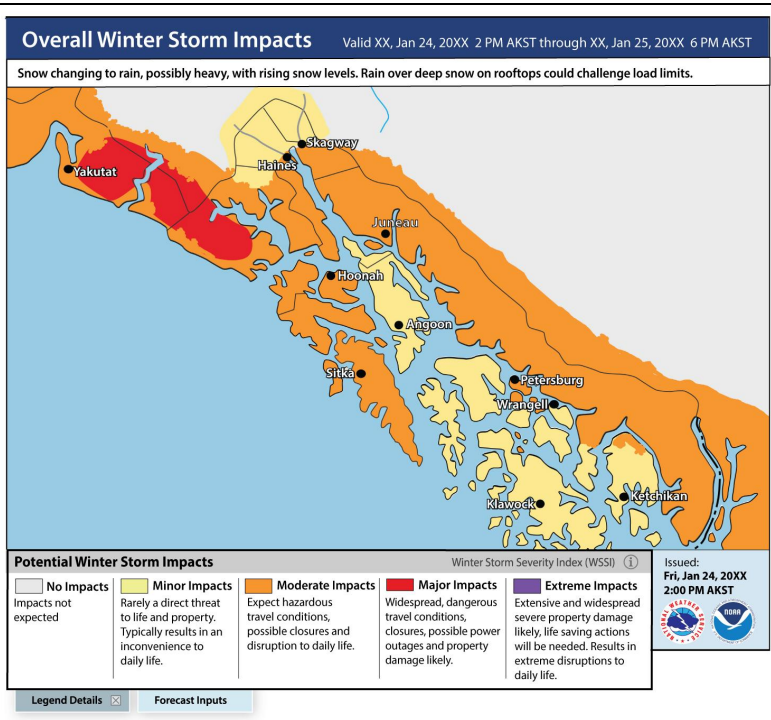
Rainfall amounts of 2 to 4 inches are possible from late T+1 through T+2. Snow levels are forecast to rise to around 2,500 feet which could introduce some nuisance flooding concerns at lower elevations. Rain over deep snow on top of structures and rooftops could challenge load limits. Please stay tuned to the forecast as it is refined through the week.

Now how you feel about your risk? What actions are you taking? Are you sharing this information with others, and if so, with whom? What other information are you looking for?

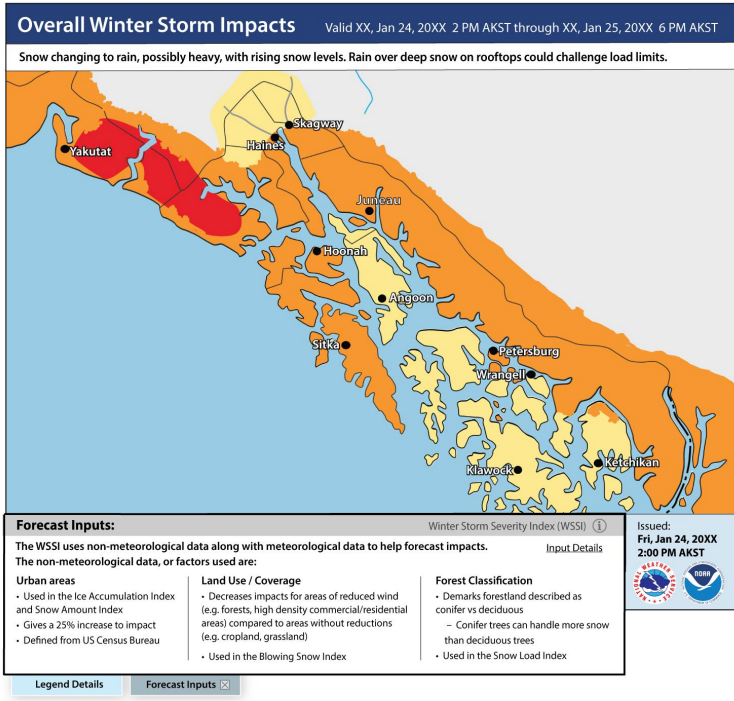


What is this product telling you? How do you interpret the impact levels? What else do you want to know based on this graphic?

Is information like this on impacts helpful or important to you?



This version shows a more complete legend description. How do these impact definitions meet your decision-making needs? Is this product possibly useful to you? How? What else would it need to be useful? Would you share this product with others, and if so, with whom?



Let's study this legend a little more closely. This legend tells you some of the background factors that are used to determine the impact levels (that is, what is considered extreme or major or moderate and why). Is this information helpful to you? What else would you be looking for when using this product? Which impacts are you most concerned about when looking at this product?

Mention forecaster's note and ask if that is helpful. What types of information would you like to see in this element?

High Wind Warning

National Weather Service Juneau AK 0400 AM AKST T-1

T-1

...HIGH WIND WARNING IN EFFECT FROM MIDNIGHT TONIGHT TO 9 PM AKDT TOMORROW...

* WHAT...Northeast winds 30 to 40 mph with gusts of 60 to 70 mph expected.

* WHERE...Juneau area, especially near Downtown Juneau and Lemon Creek.

* WHEN...From 12 AM tomorrow to 9 PM AKDT tomorrow.

* IMPACTS...Damaging winds could blow down trees and power lines. Travel will be difficult, especially for aviation and high profile vehicles.

* ADDITIONAL DETAILS...Peak winds expected near Downtown Juneau Monday evening.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A high wind warning means a hazardous high wind event is expected or occurring.

How does this high wind **warning** affect your decision-making? Do you use watches and warnings and if so, how? What impacts are you concerned about for high winds?



Winter Storm Warning



Issued: Day T-1 400 PM AKST

Threat Information



Yakutat Area:

- 12pm Day T through 6pm Day T+2
- 8-12 inches of snow expected; ice accumulation less than one quarter inch



Icy Strait, Juneau:

- 3pm Day T through 9pm Day T+1
- 6-12 inches of snow expected; 1 -2 inches of water equivalent, 2 inches starting Late Day T+1

Petersburg, Wrangell:

- 3pm Day T through 3am Day T+1
- 5-9 inches of snow expected



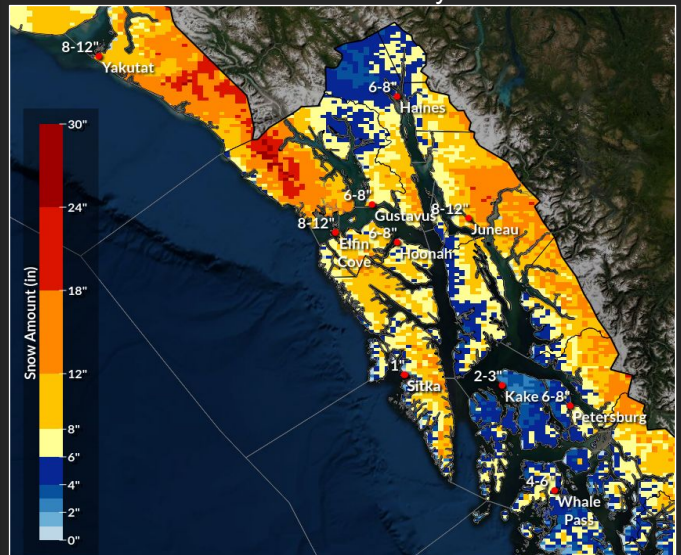
Haines Area:

- 6pm Day T through 6pm Day T+2
- 3-8 inches of snow expected, greatest along Chilkat Peninsula

Impacts/Details



- Greatest snowfall rates overnight Day T to Day T+1
- Dry snow will become wetter through time
- Change to rain expected near sea level Late Day T+1
- Expect icy due to water on frozen surfaces



National Weather Service | Juneau, AK | weather.gov/juneau

How about this winter storm warning? What does it mean to your decision-making? What impacts are you concerned about based on this warning message? Would you share this message with others, and if so, with whom and how?

5-Day Outlook for SE AK

T to T+4



NWS Juneau



T

T + 1

T + 2

T + 3

T + 4

Winter Storm Watch :

Northern Panhandle Evening T until Evening of T+2

Heavy precipitation expected:

Heavy wet snow and rainfall

Rapid increase in temperatures may lead to significant snow melt

Rain and snow adding to loads on roofs and boats

Rain showers continue after the next storm



Lowest Impacts



Minor Impacts



Moderate Impacts



Major Impacts

Issued: T-1 4:00 PM AKST

After a long cold snap, warmer winter weather returns to Southeast Alaska. A Winter Storm Watch is now in place from late T until late T+2. Precipitation is expected to start as snow and then transition to rain by late T-1. Expect heavy snow loads and nuisance flooding with this storm.

Starting late Day T snow begins to fall over the area as temperatures slowly warm. About one foot of additional snow (holding 1 to 2 inches of water) falls over the area before temperatures warm enough that the precipitation transitions to rain on Day T+1.

From Day T+1 to Day T+2 an additional 2 inches of rain falls as temperatures slowly warm into the upper 30s and 40s.

Days T+3 and T+4 have rain showers in the area but are otherwise quiet weather after the big storm system.

OK – this five-day outlook again. What is this product telling you? Are you using the impact levels in assessing your risk? What impacts are you most concerned about right now?



Heavy Precipitation



Issued: Day T 11:00 AM AKST



• Moderate to Heavy Rain

- Heavy precipitation in Snow and Rain
- 2 to 4 inches water near sea level
- Heaviest amounts Day T+1 and Day T+2
- Rain over existing snow pack will lead to:
 - Increased weight on Homes, Boats, and Planes
 - Ponding of water on roadways and low lying areas.
 - Rises in smaller streams.



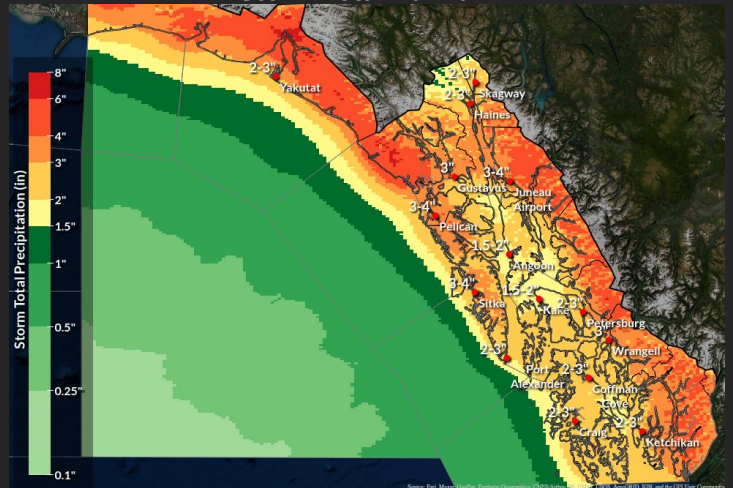
• **Late Day T (tonight) through Day T+2**



• **Widespread heavy snow and rainfall**

Keep storm drains clear and be alert to any flooding.

Storm Total Rainfall



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Heavy precipitation now is forecast. Are you taking any actions? IF so, what actions are you taking? What other information would you be looking for?

WSSI Website

Have you visited this site before?

Explain the features/give tour of the site. Note that this is for CONUS only but that there will be one for Alaska in the future.

What features of the website are most useful to you?

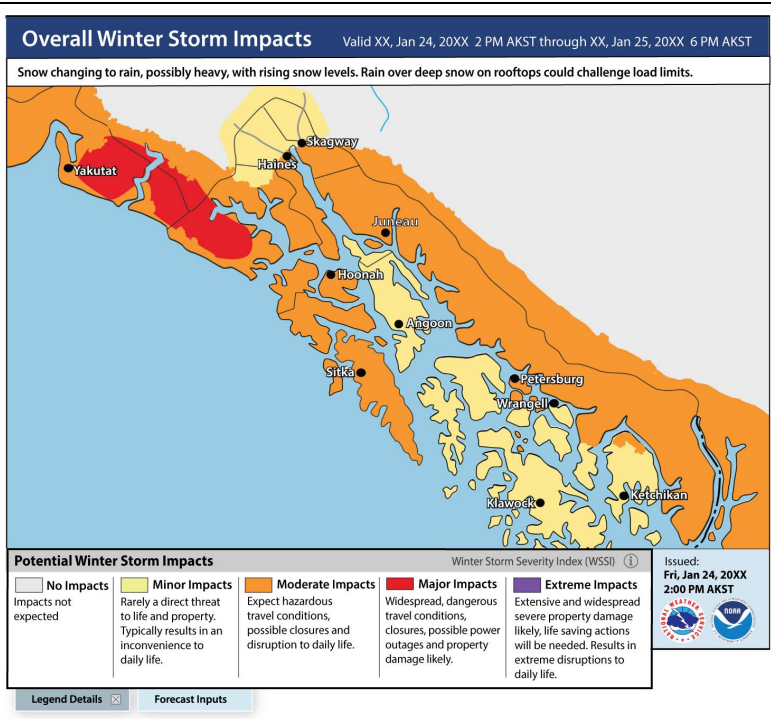
Is there anything that is missing? What additional functionality would be helpful?

Is there anything that is confusing?

How would you use the information/products on this site? When would you use it (i.e. how many days before storm)?

Ask about rolling window - is this useful? Would you use this and if so, how?

Do you prefer static images to the interactive website?



Anything else you would add? Look at forecasters' note and legend again. Leading components/impacts that need to be included in a useful product.